

## **FACILITY PERMIT TO OPERATE JOHANSON DIELECTRICS INC**

### **Facility Equipment and Requirements (Section D)**

This section consists of a table listing all permitted equipment at the facility, facility wide requirements, all individual Permits to Construct and Permits to Operate issued to various equipment at the facility, and Rule 219-exempt equipment subject to source-specific requirements. Each permit and Rule 219-exempt equipment will list operating conditions including periodic monitoring requirements, and applicable emission limits and requirements that the equipment is subject to. Also included is the rule origin and authority of each emission limit and permit condition.

## FACILITY PERMIT TO OPERATE JOHANSON DIELECTRICS INC

### PERMITTED EQUIPMENT LIST

THE FOLLOWING IS A LIST OF ALL PERMITS TO CONSTRUCT AND PERMITS TO OPERATE AT THIS FACILITY:

Application number	Permit to Operate number	Equipment description
264258	D51263	SOLDER LEVELING
283727	F15414	CASTING MACHINE #2
283728	F15413	CASTING MACHINE #3
283729	F15412	CASTING MACHINE #4
283730	F15411	CASTING MACHINE #5
283940	D82408	SOLV RECLAIM STILL (1 STAGE) MISCELLANE
284717	D76669	TANK NICKEL PLATING
297700	D91800	BAGHOUSE, AMBIENT TEMP (>100-500 SQ FT)
312189	F15407	CASTING MACHINE #6
324190	F15772	TANK NICKEL PLATING
324510	F33926	OVEN, HEAT TREATMENT
368039	F33927	BAGHOUSE, AMBIENT TEMP (>100-500 SQ FT)
368041	F33928	OVEN, HEAT TREATMENT
341607	F59947	AFTERBURNER, CATALYTIC
410489	F61777	TANK NICKEL PLATING
433671	F71910	TANK NICKEL PLATING
434948		CATALYTIC AFTERBURNER UNDER PERMIT
477126		ELECTROSTATIC PRECIP HI VOLT (>=3000CFM)
477128		CASTING MACHINE #1

**NOTE:** EQUIPMENT LISTED ABOVE THAT HAVE NO CORRESPONDING PERMITS TO OPERATE NUMBER ARE ISSUED PERMITS TO CONSTRUCT. THE ISSUANCE OR DENIAL OF THEIR PERMITS TO OPERATE IS SUBJECT TO ENGINEERING FINAL REVIEW. ANY OTHER APPLICATIONS THAT ARE STILL BEING PROCESSED AND HAVE NOT BEEN ISSUED PERMITS TO CONSTRUCT OR PERMITS TO OPERATE WILL NOT BE FOUND IN THIS TITLE V PERMIT.

## **FACILITY PERMIT TO OPERATE JOHANSON DIELECTRICS INC**

### **FACILITY WIDE CONDITION(S)**

**Condition(s):**

1. EXCEPT FOR OPEN ABRASIVE BLASTING OPERATIONS, THE OPERATOR SHALL NOT DISCHARGE INTO THE ATMOSPHERE FROM ANY SINGLE SOURCE OF EMISSIONS WHATSOEVER ANY AIR CONTAMINANT FOR A PERIOD OR PERIODS AGGREGATING MORE THAN THREE MINUTES IN ANY ONE HOUR WHICH IS:
  - A. AS DARK OR DARKER IN SHADE AS THAT DESIGNATED NO. 1 ON THE RINGELMANN CHART, AS PUBLISHED BY THE UNITED STATES BUREAU OF MINES; OR
  - B. OF SUCH OPACITY AS TO OBSCURE AN OBSERVER'S VIEW TO A DEGREE EQUAL TO OR GREATER THAN DOES SMOKE DESCRIBED IN SUBPARAGRAPH (a) OF THIS CONDITION.  
[RULE 401]
2. THE TOTAL AMOUNT OF ALL NON-FERROUS METALS MELTED AT THIS FACILITY SHALL NOT EXCEED ONE TON IN ANY ONE YEAR. THE OPERATOR SHALL MAINTAIN RECORDS IN A FORMAT WHICH IS ACCEPTABLE BY THE DISTRICT TO DEMONSTRATE COMPLIANCE WITH THIS CONDITION.  
[RULE 1407]
3. ONLY THE FURNACES UNDER PERMIT NOS. F33926 AND F33928 SHALL PROCESS MATERIALS CONTAINING LEAD OR LEAD COMPOUNDS.  
[RULE 1420]
4. ALL RECORDS REQUIRED BY THIS PERMIT SHALL BE PREPARED IN A FORMAT THAT IS ACCEPTABLE TO THE DISTRICT, SHALL BE RETAINED AT THE FACILITY FOR AT LEAST FIVE YEARS, AND SHALL BE MADE AVAILABLE TO ANY DISTRICT REPRESENTATIVE UPON REQUEST.  
[RULE 109, 1303(B)(2)-OFFSET]

## **FACILITY PERMIT TO OPERATE JOHANSON DIELECTRICS INC**

### **PERMIT TO OPERATE**

**Permit No. D51263  
A/N 264258**

**Equipment Description:**

WAVE SOLDERING MACHINE, ELECTROVERT ECONOPAK, 3'-0" W. X 12'-0" L. X 4'-8" H., 4 KW,  
ELECTRICALLY HEATED.

**Conditions:**

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.  
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.  
[RULE 204]

## **FACILITY PERMIT TO OPERATE JOHANSON DIELECTRICS INC**

### **PERMIT TO OPERATE**

**Permit No. F15414  
A/N 283727**

#### **Equipment Description:**

CASTING MACHINE # 2, JOHANSON, ASSET NO. 1843, CONTINUOUS BELT-DRIVE TYPE, 2'-0" W. X 32'-2" L. X 5'-5" H., 7.4 KW ELECTRICALLY HEATED, WITH A 1/3-HP CONVEYOR BELT.

#### **Conditions:**

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.  
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.  
[RULE 204]
3. THIS EQUIPMENT SHALL NOT BE OPERATED UNLESS IT IS VENTED TO AIR POLLUTION CONTROL EQUIPMENT WHICH IS IN FULL USE AND WHICH HAS BEEN ISSUED A PERMIT TO OPERATE BY THE EXECUTIVE OFFICER.  
[RULE 1303(b)(2)-OFFSET]
4. SOLVENT USED IN THE CERAMIC LIQUID SUSPENSIONS, CLEAN-UP SOLVENT, AND ANY OTHER MATERIALS USED IN THIS EQUIPMENT SHALL NOT CONTAIN ANY COMPOUNDS IDENTIFIED AS CARCINOGENIC AIR CONTAMINANTS IN RULE 1401 AS AMENDED ON DECEMBER 7, 1990.  
[RULE 1401]
5. THE TOTAL AMOUNT OF VOLATILE ORGANIC COMPOUND (VOC) EMISSIONS FROM THE CASTING MACHINES, RESULTING FROM THE USE OF MATERIALS CONTAINING VOC'S, SHALL NOT EXCEED 3930 POUNDS IN ANY CALENDAR MONTH.  
[RULE 1303(b)(2)-OFFSET]
6. THE OPERATOR SHALL COMPLY WITH RULE 109 (RECORD KEEPING FOR VOLATILE ORGANIC COMPOUND EMISSIONS).  
[RULE 109]
7. WITHIN 14 CALENDAR DAYS AFTER THE END OF EACH MONTH, THE OPERATOR SHALL TOTAL AND RECORD VOC EMISSIONS FOR THE MONTH FROM ALL EQUIPMENT AND OPERATIONS COVERED BY THE MONTHLY LIMIT. THE RECORD SHALL INCLUDE ANY PROCEDURES USED TO ACCOUNT FOR CONTROL DEVICE EFFICIENCY AND / OR WASTE DISPOSAL. IT SHALL BE SIGNED AND CERTIFIED FOR ACCURACY BY THE HIGHEST RANKING INDIVIDUAL RESPONSIBLE FOR COMPLIANCE WITH DISTRICT RULES.  
[RULE 109, 1303(b)(2)-OFFSET]

## **FACILITY PERMIT TO OPERATE JOHANSON DIELECTRICS INC**

8. THE OPERATOR SHALL MAINTAIN A SINGLE LIST, WHICH INCLUDES ONLY THE NAME AND ADDRESS OF EACH PERSON FROM WHOM THE FACILITY ACQUIRED VOC CONTAINING MATERIAL REGULATED BY THE DISTRICT THAT WAS USED OR STORED AT THE FACILITY DURING THE PRECEDING 12 MONTHS.  
[RULE 109, 1303(b)(2)-OFFSET]
9. THE OPERATOR SHALL RETAIN ALL PURCHASE INVOICES FOR ALL VOC CONTAINING MATERIAL USED OR STORED AT THE FACILITY, AND ALL WASTE MANIFESTS FOR ALL WASTE VOC CONTAINING MATERIAL REMOVED FROM THE FACILITY, FOR 5 YEARS.  
[RULE 109, 1303(b)(2)-OFFSET]

### **Emissions and Requirements:**

10. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:  
  
VOC: RULE 109  
VOC: RULE 442

## **FACILITY PERMIT TO OPERATE JOHANSON DIELECTRICS INC**

### **PERMIT TO OPERATE**

**Permit No. F15413  
A/N 283728**

#### **Equipment Description:**

CASTING MACHINE # 3, JOHANSON, ASSET NO. 1889, CONTINUOUS BELT-DRIVE TYPE, 2'-0" W. X 32'-2" L. X 5'-5" H., 7.4 KW ELECTRICALLY HEATED, WITH A 1/3-HP CONVEYOR BELT.

#### **Conditions:**

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.  
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.  
[RULE 204]
3. THIS EQUIPMENT SHALL NOT BE OPERATED UNLESS IT IS VENTED TO AIR POLLUTION CONTROL EQUIPMENT WHICH IS IN FULL USE AND WHICH HAS BEEN ISSUED A PERMIT TO OPERATE BY THE EXECUTIVE OFFICER.  
[RULE 1303(b)(2)-OFFSET]
4. SOLVENT USED IN THE CERAMIC LIQUID SUSPENSIONS, CLEAN-UP SOLVENT, AND ANY OTHER MATERIALS USED IN THIS EQUIPMENT SHALL NOT CONTAIN ANY COMPOUNDS IDENTIFIED AS CARCINOGENIC AIR CONTAMINANTS IN RULE 1401 AS AMENDED ON DECEMBER 7, 1990.  
[RULE 1401]
5. THE TOTAL AMOUNT OF VOLATILE ORGANIC COMPOUND (VOC) EMISSIONS FROM THE CASTING MACHINES, RESULTING FROM THE USE OF MATERIALS CONTAINING VOC'S, SHALL NOT EXCEED 3930 POUNDS IN ANY CALENDAR MONTH.  
[RULE 1303(b)(2)-OFFSET]
6. THE OPERATOR SHALL COMPLY WITH RULE 109 (RECORD KEEPING FOR VOLATILE ORGANIC COMPOUND EMISSIONS).  
[RULE 109]
7. WITHIN 14 CALENDAR DAYS AFTER THE END OF EACH MONTH, THE OPERATOR SHALL TOTAL AND RECORD VOC EMISSIONS FOR THE MONTH FROM ALL EQUIPMENT AND OPERATIONS COVERED BY THE MONTHLY LIMIT. THE RECORD SHALL INCLUDE ANY PROCEDURES USED TO ACCOUNT FOR CONTROL DEVICE EFFICIENCY AND / OR WASTE DISPOSAL. IT SHALL BE SIGNED AND CERTIFIED FOR ACCURACY BY THE HIGHEST RANKING INDIVIDUAL RESPONSIBLE FOR COMPLIANCE WITH DISTRICT RULES.  
[RULE 109, 1303(b)(2)-OFFSET]

## **FACILITY PERMIT TO OPERATE JOHANSON DIELECTRICS INC**

8. THE OPERATOR SHALL MAINTAIN A SINGLE LIST, WHICH INCLUDES ONLY THE NAME AND ADDRESS OF EACH PERSON FROM WHOM THE FACILITY ACQUIRED VOC CONTAINING MATERIAL REGULATED BY THE DISTRICT THAT WAS USED OR STORED AT THE FACILITY DURING THE PRECEDING 12 MONTHS.  
[RULE 109, 1303(b)(2)-OFFSET]
9. THE OPERATOR SHALL RETAIN ALL PURCHASE INVOICES FOR ALL VOC CONTAINING MATERIAL USED OR STORED AT THE FACILITY, AND ALL WASTE MANIFESTS FOR ALL WASTE VOC CONTAINING MATERIAL REMOVED FROM THE FACILITY, FOR 5 YEARS.  
[RULE 109, 1303(b)(2)-OFFSET]

### **Emissions and Requirements:**

10. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:  
  
VOC RULE 109  
VOC: RULE 442



## **FACILITY PERMIT TO OPERATE JOHANSON DIELECTRICS INC**

### **PERMIT TO OPERATE**

**Permit No. F15412  
A/N 283729**

#### **Equipment Description:**

CASTING MACHINE # 4, JOHANSON, ASSET NO. 0673, CONTINUOUS BELT-DRIVE TYPE, 2'-0" W. X 32'-2" L. X 5'-5" H., 7.4 KW ELECTRICALLY HEATED, WITH A 1/3-HP CONVEYOR BELT.

#### **Conditions:**

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.  
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.  
[RULE 204]
3. THIS EQUIPMENT SHALL NOT BE OPERATED UNLESS IT IS VENTED TO AIR POLLUTION CONTROL EQUIPMENT WHICH IS IN FULL USE AND WHICH HAS BEEN ISSUED A PERMIT TO OPERATE BY THE EXECUTIVE OFFICER.  
[RULE 1303(b)(2)-OFFSET]
4. SOLVENT USED IN THE CERAMIC LIQUID SUSPENSIONS, CLEAN-UP SOLVENT, AND ANY OTHER MATERIALS USED IN THIS EQUIPMENT SHALL NOT CONTAIN ANY COMPOUNDS IDENTIFIED AS CARCINOGENIC AIR CONTAMINANTS IN RULE 1401 AS AMENDED ON DECEMBER 7, 1990.  
[RULE 1401]
5. THE TOTAL AMOUNT OF VOLATILE ORGANIC COMPOUND (VOC) EMISSIONS FROM THE CASTING MACHINES, RESULTING FROM THE USE OF MATERIALS CONTAINING VOC'S, SHALL NOT EXCEED 3930 POUNDS IN ANY CALENDAR MONTH.  
[RULE 1303(b)(2)-OFFSET]
6. THE OPERATOR SHALL COMPLY WITH RULE 109 (RECORD KEEPING FOR VOLATILE ORGANIC COMPOUND EMISSIONS).  
[RULE 109]
7. WITHIN 14 CALENDAR DAYS AFTER THE END OF EACH MONTH, THE OPERATOR SHALL TOTAL AND RECORD VOC EMISSIONS FOR THE MONTH FROM ALL EQUIPMENT AND OPERATIONS COVERED BY THE MONTHLY LIMIT. THE RECORD SHALL INCLUDE ANY PROCEDURES USED TO ACCOUNT FOR CONTROL DEVICE EFFICIENCY AND / OR WASTE DISPOSAL. IT SHALL BE SIGNED AND CERTIFIED FOR ACCURACY BY THE HIGHEST RANKING INDIVIDUAL RESPONSIBLE FOR COMPLIANCE WITH DISTRICT RULES.  
[RULE 109, 1303(b)(2)-OFFSET]

## **FACILITY PERMIT TO OPERATE JOHANSON DIELECTRICS INC**

8. THE OPERATOR SHALL MAINTAIN A SINGLE LIST, WHICH INCLUDES ONLY THE NAME AND ADDRESS OF EACH PERSON FROM WHOM THE FACILITY ACQUIRED VOC CONTAINING MATERIAL REGULATED BY THE DISTRICT THAT WAS USED OR STORED AT THE FACILITY DURING THE PRECEDING 12 MONTHS.  
[RULE 109, 1303(b)(2)-OFFSET]
9. THE OPERATOR SHALL RETAIN ALL PURCHASE INVOICES FOR ALL VOC CONTAINING MATERIAL USED OR STORED AT THE FACILITY, AND ALL WASTE MANIFESTS FOR ALL WASTE VOC CONTAINING MATERIAL REMOVED FROM THE FACILITY, FOR 5 YEARS.  
[RULE 109, 1303(b)(2)-OFFSET]

### **Emissions and Requirements:**

10. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:  
  
VOC: RULE 109  
VOC: RULE 442

## **FACILITY PERMIT TO OPERATE JOHANSON DIELECTRICS INC**

### **PERMIT TO OPERATE**

**Permit No. F15411  
A/N 283730**

#### **Equipment Description:**

CASTING MACHINE # 5, JOHANSON, ASSET NO. 1899, CONTINUOUS BELT-DRIVE TYPE, 2'-0" W. X 32'-2" L. X 5'-5" H., 7.4 KW ELECTRICALLY HEATED, WITH A 1/3-HP CONVEYOR BELT.

#### **Conditions:**

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.  
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.  
[RULE 204]
3. THIS EQUIPMENT SHALL NOT BE OPERATED UNLESS IT IS VENTED TO AIR POLLUTION CONTROL EQUIPMENT WHICH IS IN FULL USE AND WHICH HAS BEEN ISSUED A PERMIT TO OPERATE BY THE EXECUTIVE OFFICER.  
[RULE 1303(b)(2)-OFFSET]
4. SOLVENT USED IN THE CERAMIC LIQUID SUSPENSIONS, CLEAN-UP SOLVENT, AND ANY OTHER MATERIALS USED IN THIS EQUIPMENT SHALL NOT CONTAIN ANY COMPOUNDS IDENTIFIED AS CARCINOGENIC AIR CONTAMINANTS IN RULE 1401 AS AMENDED ON DECEMBER 7, 1990.  
[RULE 1401]
5. THE TOTAL AMOUNT OF VOLATILE ORGANIC COMPOUND (VOC) EMISSIONS FROM THE CASTING MACHINES, RESULTING FROM THE USE OF MATERIALS CONTAINING VOC'S, SHALL NOT EXCEED 3930 POUNDS IN ANY CALENDAR MONTH.  
[RULE 1303(b)(2)-OFFSET]
6. THE OPERATOR SHALL COMPLY WITH RULE 109 (RECORD KEEPING FOR VOLATILE ORGANIC COMPOUND EMISSIONS).  
[RULE 109]
7. WITHIN 14 CALENDAR DAYS AFTER THE END OF EACH MONTH, THE OPERATOR SHALL TOTAL AND RECORD VOC EMISSIONS FOR THE MONTH FROM ALL EQUIPMENT AND OPERATIONS COVERED BY THE MONTHLY LIMIT. THE RECORD SHALL INCLUDE ANY PROCEDURES USED TO ACCOUNT FOR CONTROL DEVICE EFFICIENCY AND / OR WASTE DISPOSAL. IT SHALL BE SIGNED AND CERTIFIED FOR ACCURACY BY THE HIGHEST RANKING INDIVIDUAL RESPONSIBLE FOR COMPLIANCE WITH DISTRICT RULES.  
[RULE 109, 1303(b)(2)-OFFSET]

## **FACILITY PERMIT TO OPERATE JOHANSON DIELECTRICS INC**

8. THE OPERATOR SHALL MAINTAIN A SINGLE LIST, WHICH INCLUDES ONLY THE NAME AND ADDRESS OF EACH PERSON FROM WHOM THE FACILITY ACQUIRED VOC CONTAINING MATERIAL REGULATED BY THE DISTRICT THAT WAS USED OR STORED AT THE FACILITY DURING THE PRECEDING 12 MONTHS.  
[RULE 109, 1303(b)(2)-OFFSET]
9. THE OPERATOR SHALL RETAIN ALL PURCHASE INVOICES FOR ALL VOC CONTAINING MATERIAL USED OR STORED AT THE FACILITY, AND ALL WASTE MANIFESTS FOR ALL WASTE VOC CONTAINING MATERIAL REMOVED FROM THE FACILITY, FOR 5 YEARS.  
[RULE 109, 1303(b)(2)-OFFSET]

### **Emissions and Requirements:**

10. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:  
  
VOC: RULE 109  
VOC: RULE 442

## **FACILITY PERMIT TO OPERATE JOHANSON DIELECTRICS INC**

### **PERMIT TO OPERATE**

**Permit No. D82408  
A/N 283940**

#### **Equipment Description:**

SOLVENT RECOVERY STILL, FINISHING THOMPSON, MODEL LS-55-IID, 3'-4" W. X 6'-3" L. X 5'.0" H.  
(OUTSIDE DIMENSIONS OF STILL), ELECTRICALLY HEATED.

#### **Conditions:**

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.  
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.  
[RULE 204]
3. THE AMOUNT OF SOLVENT RECOVERED IN THIS EQUIPMENT SHALL NOT EXCEED 1650 GALLONS PER MONTH.  
[RULE 1303(b)(2)-OFFSET]
4. THE OPERATOR SHALL KEEP ADEQUATE RECORDS TO VERIFY THE TYPE AND MONTHLY AMOUNT OF SOLVENTS RECOVERED IN THIS EQUIPMENT. SUCH RECORDS SHALL BE RETAINED IN A MANNER APPROVED IN WRITING BY THE DIRECTOR OF COMPLIANCE FOR A PERIOD OF FIVE YEARS, AND SHALL BE MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.  
[RULE 1303(b)(2)-OFFSET]

## **FACILITY PERMIT TO OPERATE JOHANSON DIELECTRICS INC**

### **PERMIT TO OPERATE**

**Permit No. D76669  
A/N 284717**

#### **Equipment Description:**

NICKEL AND TIN PLATING LINE CONSISTING OF:

1. FOUR NICKEL PLATING TANKS, BORIC ACID AND NICKEL SULFAMATE, 2'-8" W. X 3'-6" L. X 2'-2" D., EACH WITH A 1/3 HP PUMP AND A 4 KW ELECTRIC HEATER.
2. FOUR TIN PLATING TANKS, 2'-8" W. X 3'-6" L. X 2'-2" D., EACH WITH A 1/3 HP PUMP AND A 4 KW ELECTRIC HEATER.
3. ASSOCIATED RINSE TANKS.

#### **Conditions:**

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.  
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.  
[RULE 204]

#### **Emissions and Requirements:**

3. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATION:

HAP(S):            RULE 1426

## **FACILITY PERMIT TO OPERATE JOHANSON DIELECTRICS INC**

### **PERMIT TO OPERATE**

**Permit No. D91800  
A/N 297700**

#### **Equipment Description:**

AIR POLLUTION CONTROL SYSTEM CONSISTING OF:

1. BAGHOUSE, TENKAY, MODEL AQB 8-60, 8'-0" W. X 7'-6" L. X 7'-6" H., WITH TEN FILTER CARTRIDGES AND 2,400 SQUARE FEET OF FILTER AREA.
2. EXHAUST SYSTEM WITH A 5 HP BLOWER VENTING THE CERAMIC MIXING AREA.

#### **Conditions:**

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.  
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.  
[RULE 204]
3. A GAUGE SHALL BE MAINTAINED TO INDICATE, IN INCHES OF WATER COLUMN, THE STATIC PRESSURE DIFFERENTIAL ACROSS THE CARTRIDGE FILTERS.  
[RULE 1303(a)(1)-BACT]
4. THE PRESSURE DROP ACROSS THE CARTRIDGE FILTERS SHALL NOT EXCEED 3.0 INCHES WATER COLUMN AT ANY TIME DURING THE OPERATION.  
[RULE 1303(a)(1)-BACT]
5. DUST COLLECTED IN THE BAGHOUSE SHALL BE DISCHARGED ONLY INTO CLOSED CONTAINERS.  
[RULE 1303(a)(1)-BACT]

#### **Periodic Monitoring:**

6. THE OPERATOR SHALL PERFORM AN ANNUAL INSPECTION OF THE EQUIPMENT AND FILTER MEDIA FOR LEAKS, BROKEN OR TORN FILTER MEDIA AND IMPROPERLY INSTALLED FILTER MEDIA. THE OPERATOR SHALL KEEP RECORDS, IN A MANNER APPROVED BY THE DISTRICT, FOR THE FOLLOWING PARAMETER(S) OR ITEM(S):
  - A. THE NAME OF THE PERSON PERFORMING THE INSPECTION AND/OR MAINTENANCE OF THE FILTER MEDIA;
  - B. THE DATE, TIME AND RESULTS OF THE INSPECTION; AND
  - C. THE DATE, TIME AND DESCRIPTION OF ANY MAINTENANCE OR REPAIRS RESULTING FROM THE INSPECTION.

## **FACILITY PERMIT TO OPERATE JOHANSON DIELECTRICS INC**

[RULE 3004(a)(4)]

7. THE OPERATOR SHALL CONDUCT AN INSPECTION FOR VISIBLE EMISSIONS FROM ALL STACKS AND OTHER EMISSION POINTS OF THIS EQUIPMENT WHENEVER THERE IS A PUBLIC COMPLAINT OF VISIBLE EMISSIONS, WHENEVER VISIBLE EMISSIONS ARE OBSERVED, AND ON A QUARTERLY BASIS, AT LEAST, UNLESS THE EQUIPMENT DID NOT OPERATE DURING THE ENTIRE QUARTERLY PERIOD. THE ROUTINE QUARTERLY INSPECTION SHALL BE CONDUCTED WHILE THE EQUIPMENT IS IN OPERATION AND DURING DAYLIGHT HOURS.
- IF ANY VISIBLE EMISSIONS (NOT INCLUDING CONDENSED WATER VAPOR) ARE DETECTED, THE OPERATOR SHALL TAKE CORRECTIVE ACTION(S) THAT ELIMINATES THE VISIBLE EMISSIONS WITHIN 24 HOURS AND REPORT THE VISIBLE EMISSIONS AS A POTENTIAL DEVIATION IN ACCORDANCE WITH THE REPORTING REQUIREMENTS IN SECTION K OF THIS PERMIT.
- THE OPERATOR SHALL KEEP THE RECORDS IN ACCORDANCE WITH THE RECORDKEEPING REQUIREMENTS IN SECTION K OF THIS PERMIT AND THE FOLLOWING RECORDS:
- A. STACK OR EMISSION POINT IDENTIFICATION;
  - B. DESCRIPTION OF ANY CORRECTIVE ACTIONS TAKEN TO ABATE VISIBLE EMISSIONS; AND
  - C. DATE AND TIME VISIBLE EMISSION WAS ABATED.

[RULE 3004(a)(4)]

### **Emissions and Requirements:**

8. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATION:
- PM: RULE 404, SEE APPENDIX B FOR EMISSION LIMITS



## **FACILITY PERMIT TO OPERATE JOHANSON DIELECTRICS INC**

### **PERMIT TO OPERATE**

**Permit No. F15407  
A/N 312189**

#### **Equipment Description:**

CASTING MACHINE # 6, JOHANSON, ASSET NO. 2504, CONTINUOUS BELT-DRIVE TYPE, 2'-0" W. X 32'-2" L. X 5'-5" H., 7.4 KW ELECTRICALLY HEATED, WITH A 1/3-HP CONVEYOR BELT.

#### **Conditions:**

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.  
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.  
[RULE 204]
3. THIS EQUIPMENT SHALL NOT BE OPERATED UNLESS IT IS VENTED TO AIR POLLUTION CONTROL EQUIPMENT WHICH IS IN FULL USE AND WHICH HAS BEEN ISSUED A PERMIT TO OPERATE BY THE EXECUTIVE OFFICER.  
[RULE 1303(b)(2)-OFFSET]
4. SOLVENT USED IN THE CERAMIC LIQUID SUSPENSIONS, CLEAN-UP SOLVENT, AND ANY OTHER MATERIALS USED IN THIS EQUIPMENT SHALL NOT CONTAIN ANY COMPOUNDS IDENTIFIED AS CARCINOGENIC AIR CONTAMINANTS IN RULE 1401 AS AMENDED ON DECEMBER 7, 1990.  
[RULE 1401]
5. THE TOTAL AMOUNT OF VOLATILE ORGANIC COMPOUND (VOC) EMISSIONS FROM THE CASTING MACHINES, RESULTING FROM THE USE OF MATERIALS CONTAINING VOC'S, SHALL NOT EXCEED 3930 POUNDS IN ANY CALENDAR MONTH.  
[RULE 1303(b)(2)-OFFSET]
6. THE OPERATOR SHALL COMPLY WITH RULE 109 (RECORD KEEPING FOR VOLATILE ORGANIC COMPOUND EMISSIONS).  
[RULE 109]
7. WITHIN 14 CALENDAR DAYS AFTER THE END OF EACH MONTH, THE OPERATOR SHALL TOTAL AND RECORD VOC EMISSIONS FOR THE MONTH FROM ALL EQUIPMENT AND OPERATIONS COVERED BY THE MONTHLY LIMIT. THE RECORD SHALL INCLUDE ANY PROCEDURES USED TO ACCOUNT FOR CONTROL DEVICE EFFICIENCY AND / OR WASTE DISPOSAL. IT SHALL BE SIGNED AND CERTIFIED FOR ACCURACY BY THE HIGHEST RANKING INDIVIDUAL RESPONSIBLE FOR COMPLIANCE WITH DISTRICT RULES.  
[RULE 109, 1303(b)(2)-OFFSET]

## **FACILITY PERMIT TO OPERATE JOHANSON DIELECTRICS INC**

8. THE OPERATOR SHALL MAINTAIN A SINGLE LIST, WHICH INCLUDES ONLY THE NAME AND ADDRESS OF EACH PERSON FROM WHOM THE FACILITY ACQUIRED VOC CONTAINING MATERIAL REGULATED BY THE DISTRICT THAT WAS USED OR STORED AT THE FACILITY DURING THE PRECEDING 12 MONTHS.  
[RULE 109, 1303(b)(2)-OFFSET]
9. THE OPERATOR SHALL RETAIN ALL PURCHASE INVOICES FOR ALL VOC CONTAINING MATERIAL USED OR STORED AT THE FACILITY, AND ALL WASTE MANIFESTS FOR ALL WASTE VOC CONTAINING MATERIAL REMOVED FROM THE FACILITY, FOR 5 YEARS.  
[RULE 109, 1303(b)(2)-OFFSET]

### **Emissions and Requirements:**

10. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:  
  
VOC: RULE 109  
VOC: RULE 442

## **FACILITY PERMIT TO OPERATE JOHANSON DIELECTRICS INC**

### **PERMIT TO OPERATE**

**Permit No. F15772  
A/N 324190**

#### **Equipment Description:**

NICKEL AND TIN PLATING SYSTEM CONSISTING OF:

1. TANK NO. 1, TIN PLATING, 1'-3" W. X 1'-5" L. X 1'-5" D., WITH A 25 VOLTS AND 100 AMPERES RECTIFIER.
2. TANK NO. 2, TIN PLATING, 1'-3" W. X 1'-5" L. X 1'-5" D., WITH A 25 VOLTS AND 100 AMPERES RECTIFIER.
3. TANK NO. 3, TIN PLATING, 1'-3" W. X 1'-5" L. X 1'-5" D., WITH A 25 VOLTS AND 100 AMPERES RECTIFIER.
4. TANK NO. 4, NICKEL PLATING, 1'-3" W. X 1'-5" L. X 1'-5" D., 2 KW ELECTRICALLY HEATED, WITH A 25 VOLTS AND 100 AMPERES RECTIFIER.
5. TANK NO. 5, NICKEL PLATING, 1'-3" W. X 1'-5" L. X 1'-5" D., 2 KW ELECTRICALLY HEATED, WITH A 25 VOLTS AND 100 AMPERES RECTIFIER.
6. TANK NO. 6, NICKEL PLATING, 1'-3" W. X 1'-5" L. X 1'-5" D., 2 KW ELECTRICALLY HEATED, WITH A 25 VOLTS AND 100 AMPERES RECTIFIER.

#### **Conditions:**

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.  
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.  
[RULE 204]
3. MATERIALS USED IN THIS EQUIPMENT SHALL NOT CONTAIN ANY CARCINOGENIC COMPOUNDS AS SPECIFIED DISTRICT RULE 1401 AS AMENDED JULY 1998.  
[RULE 1401]
4. THE OPERATOR SHALL RECORD THE CONCENTRATION OF THE CHEMICAL IN THE TANK DURING REPLENISHMENT. ALL RECORDS SHALL BE PREPARED IN A FORMAT WHICH IS ACCEPTABLE TO THE DISTRICT, SHALL BE RETAINED ON THE PREMISES FOR AT LEAST FIVE YEARS, AND SHALL BE MADE AVAILABLE UPON REQUEST OF THE EXECUTIVE OFFICER OR HIS REPRESENTATIVES.  
[RULE 109, 1303(b)(2)-OFFSET]

## **FACILITY PERMIT TO OPERATE JOHANSON DIELECTRICS INC**

5. A TEMPERATURE GAUGE INDICATING DEGREES FAHRENHEIT SHALL BE MAINTAINED IN THIS EQUIPMENT TO MEASURE THE TEMPERATURE OF THE SOLUTION IN THE TANK.  
[RULE 1303(b)(2)-OFFSET]
6. THE TEMPERATURE OF THE SOLUTION IN THE TANK SHALL NOT EXCEED 150 DEGREES FAHRENHEIT.  
[RULE 1303(b)(2)-OFFSET]

### **Periodic Monitoring:**

7. THE OPERATOR SHALL DETERMINE AND RECORD THE TEMPERATURE OF THE SOLUTION IN THE TANK ONCE EVERY DAY.  
[RULE 3004(a)(4)]

### **Emissions and Requirements:**

8. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATION:  
  
HAP(S):            RULE 1426

## **FACILITY PERMIT TO OPERATE JOHANSON DIELECTRICS INC**

### **PERMIT TO OPERATE**

**Permit No. F33926  
A/N 324510**

#### **Equipment Description:**

HEAT TREATING FURNACE, NO. 4, HARPER, ELECTRICALLY HEATED, 275 KVA WITH A 14" X 14" X 20' TUNNEL.

#### **Conditions:**

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.  
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.  
[RULE 204]
3. THE OPERATOR SHALL NOT USE THIS EQUIPMENT UNLESS IT IS VENTED TO AIR POLLUTION CONTROL EQUIPMENT THAT HAS A VALID PERMIT AND IT IS IN FULL OPERATION.  
[RULE 401, 1303(a)(1)-BACT]

#### **Emissions and Requirements:**

4. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATION:  
  
PM: RULE 405, SEE APPENDIX B FOR EMISSION LIMITS

## **FACILITY PERMIT TO OPERATE JOHANSON DIELECTRICS INC**

### **PERMIT TO OPERATE**

**Permit No. F33927  
A/N 368039**

#### **Equipment Description:**

AIR POLLUTION CONTROL SYSTEM CONSISTING OF:

1. DUST COLLECTOR, AGET MFG. CO. MODEL FT-40, WITH 40 COTTON SATEEN FILTER BAGS, MANUAL BAG SHAKER AND HOPPER BOTTOM FOR DISCHARGE.
2. EXHAUST SYSTEM WITH ONE H.P. EXHAUST FAN VENTING TWO ELECTRICALLY HEATED FURNACES.

#### **Conditions:**

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.  
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.  
[RULE 204]
3. DUST COLLECTED IN THE BAGHOUSE SHALL BE DISCHARGED ONLY INTO A CLOSED CONTAINER.  
[RULE 1303(a)(1)-BACT]

#### **Periodic Monitoring:**

4. THE OPERATOR SHALL PERFORM AN ANNUAL INSPECTION OF THE EQUIPMENT AND FILTER MEDIA FOR LEAKS, BROKEN OR TORN FILTER MEDIA AND IMPROPERLY INSTALLED FILTER MEDIA. THE OPERATOR SHALL KEEP RECORDS, IN A MANNER APPROVED BY THE DISTRICT, FOR THE FOLLOWING PARAMETER(S) OR ITEM(S):
  - A. THE NAME OF THE PERSON PERFORMING THE INSPECTION AND/OR MAINTENANCE OF THE FILTER MEDIA;
  - B. THE DATE, TIME AND RESULTS OF THE INSPECTION; AND
  - C. THE DATE, TIME AND DESCRIPTION OF ANY MAINTENANCE OR REPAIRS RESULTING FROM THE INSPECTION.[RULE 3004(a)(4)]
5. THE OPERATOR SHALL CONDUCT AN INSPECTION FOR VISIBLE EMISSIONS FROM ALL STACKS AND OTHER EMISSION POINTS OF THIS EQUIPMENT WHENEVER THERE IS A PUBLIC COMPLAINT OF VISIBLE EMISSIONS, WHENEVER VISIBLE EMISSIONS ARE OBSERVED, AND ON

## **FACILITY PERMIT TO OPERATE JOHANSON DIELECTRICS INC**

A QUARTERLY BASIS, AT LEAST, UNLESS THE EQUIPMENT DID NOT OPERATE DURING THE ENTIRE QUARTERLY PERIOD. THE ROUTINE QUARTERLY INSPECTION SHALL BE CONDUCTED WHILE THE EQUIPMENT IS IN OPERATION AND DURING DAYLIGHT HOURS.

IF ANY VISIBLE EMISSIONS (NOT INCLUDING CONDENSED WATER VAPOR) ARE DETECTED, THE OPERATOR SHALL TAKE CORRECTIVE ACTION(S) THAT ELIMINATES THE VISIBLE EMISSIONS WITHIN 24 HOURS AND REPORT THE VISIBLE EMISSIONS AS A POTENTIAL DEVIATION IN ACCORDANCE WITH THE REPORTING REQUIREMENTS IN SECTION K OF THIS PERMIT.

THE OPERATOR SHALL KEEP THE RECORDS IN ACCORDANCE WITH THE RECORDKEEPING REQUIREMENTS IN SECTION K OF THIS PERMIT AND THE FOLLOWING RECORDS:

- A. STACK OR EMISSION POINT IDENTIFICATION;
- B. DESCRIPTION OF ANY CORRECTIVE ACTIONS TAKEN TO ABATE VISIBLE EMISSIONS; AND
- C. DATE AND TIME VISIBLE EMISSION WAS ABATED.

[RULE 3004(a)(4)]

### **Emissions and Requirements:**

6. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATION:

PM: RULE 404, SEE APPENDIX B FOR EMISSION LIMITS

## **FACILITY PERMIT TO OPERATE JOHANSON DIELECTRICS INC**

### **PERMIT TO OPERATE**

**Permit No. F33928  
A/N 368041**

#### **Equipment Description:**

HEAT TREATING FURNACE, NO. 3, HARPER, ELECTRICALLY HEATED, 80 KVA WITH A 7" X 12" X 12' TUNNEL.

#### **Conditions:**

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.  
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.  
[RULE 204]
3. THE OPERATOR SHALL NOT USE THIS EQUIPMENT UNLESS IT IS VENTED TO AIR POLLUTION CONTROL EQUIPMENT THAT HAS A VALID PERMIT AND IT IS IN FULL OPERATION.  
[RULE 401, 1303(a)(1)-BACT]

#### **Emissions and Requirements:**

4. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATION:

PM: RULE 405, SEE APPENDIX B FOR EMISSION LIMITS



## **FACILITY PERMIT TO OPERATE JOHANSON DIELECTRICS INC**

### **PERMIT TO OPERATE**

**Permit No. F59947  
A/N 341607**

#### **Equipment Description:**

AIR POLLUTION CONTROL SYSTEM CONSISTING OF:

- A. AFTERBURNER, CATALYTIC OXIDIZER, BAKER FURNACE, 10'-0" W. X 16'-0" L. X 18'-6" H., NATURAL GAS FIRED, 3.0 MMBTU/HR, WITH 4.13 SQ. FT. OF CATALYST
- B. HEAT EXCHANGER
- C. 30 H.P. EXHAUST FAN VENTING SIX CASTING MACHINES

#### **Conditions:**

- 1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.  
[RULE 204]
- 2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.  
[RULE 204]
- 3. THE OPERATOR SHALL OPERATE AND MAINTAIN THIS EQUIPMENT ACCORDING TO THE FOLLOWING REQUIREMENTS:

THE CATALYST BED INLET TEMPERATURE SHALL BE MAINTAINED AT A MINIMUM OF 700 DEGREES FAHRENHEIT AND THE TEMPERATURE AT THE OUTLET OF THE CATALYST BED SHALL NOT EXCEED 1100 DEGREES FAHRENHEIT WHENEVER THE EQUIPMENT IT SERVES IS IN OPERATION.

THE OPERATOR SHALL OPERATE AND MAINTAIN A TEMPERATURE MEASURING AND RECORDING SYSTEM TO CONTINUOUSLY MEASURE AND RECORD THE TEMPERATURES AT THE INLET AND OUTLET OF THE CATALYST BED PURSUANT TO THE OPERATION AND MAINTENANCE REQUIREMENTS SPECIFIED IN 40 CFR PART 64.7. SUCH A TEMPERATURE MEASURING AND RECORDING SYSTEM SHALL HAVE AN ACCURACY OF WITHIN  $\pm 1\%$  OF THE TEMPERATURE BEING MONITORED AND SHALL BE INSPECTED, MAINTAINED, AND CALIBRATED ON AN ANNUAL BASIS IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

FOR THE PURPOSE OF THIS CONDITION, A DEVIATION SHALL BE DEFINED AS WHEN THE CATALYST BED INLET TEMPERATURE OF LESS THAN 700 DEGREES FAHRENHEIT AND A TEMPERATURE OF MORE THAN 1100 DEGREES FAHRENHEIT AT THE OUTLET OF THE

## **FACILITY PERMIT TO OPERATE JOHANSON DIELECTRICS INC**

CATALYST BED OCCURS DURING THE NORMAL OPERATION OF THE EQUIPMENT IT SERVES. THE OPERATOR SHALL REVIEW THE RECORDS OF THE CATALYST BED INLET AND OUTLET TEMPERATURE ON A DAILY BASIS TO DETERMINE IF A DEVIATION OCCURS OR SHALL INSTALL AN ALARM SYSTEM TO ALERT THE OPERATOR WHEN A DEVIATION OCCURS. WHENEVER A DEVIATION OCCURS, THE OPERATOR SHALL INSPECT THIS EQUIPMENT TO IDENTIFY THE CAUSE OF SUCH A DEVIATION, TAKE IMMEDIATE CORRECTIVE ACTIONS TO MAINTAIN THE CATALYST BED INLET TEMPERATURE AT OR ABOVE 700 DEGREES FAHRENHEIT AND THE CATLYST BED OUTLET TEMPERATURE AT OR BELOW 1100 DEGREES FAHRENHEIT, AND KEEP RECORDS OF THE DURATION AND CAUSE (INCLUDING UNKNOWN CAUSE, IF APPLICABLE) OF THE DEVIATION AND THE CORRECTIVE ACTIONS TAKEN.

ALL DEVIATIONS SHALL BE REPORTED TO THE AQMD PURSUANT TO THE REQUIREMENTS SPECIFIED IN 40 CFR PART 64.9 AND CONDITION NOS. 22 AND 23 IN SECTION K OF THIS PERMIT. THE REPORT SHALL INCLUDE THE TOTAL OPERATING TIME OF THIS EQUIPMENT AND THE TOTAL ACCUMULATED DURATION OF ALL DEVIATIONS FOR EACH SEMI-ANNUAL REPORTING PERIOD SPECIFIED IN CONDITION NO. 23, SECTION K OF THIS PERMIT.

THE OPERATOR SHALL SUBMIT AN APPLICATION WITH AN QUALITY IMPROVEMENT PLAN (QIP) IN ACCORDANCE WITH 40 CFR PART 64.8 TO THE AQMD IF AN ACCUMULATION OF DEVIATIONS EXCEEDS 5 PERCENT DURATION OF THIS EQUIPMENT'S TOTAL OPERATING TIME FOR ANY SEMI-ANNUAL REPORTING PERIOD SPECIFIED IN CONDITION NO. 23, SECTION K OF THIS PERMIT. THE REQUIRED QIP SHALL BE SUBMITTED TO THE AQMD WITHIN 90 CALENDAR DAYS AFTER THE DUE DATE FOR THE SEMI-ANNUAL MONITORING REPORT.

THE OPERATOR SHALL CONDUCT ACTIVITY TEST FOR THE CATALYST BED ON A SEMI-ANNUAL BASIS. IN ADDITION, THE OPERATOR SHALL INSPECT AND MAINTAIN ALL COMPONENTS OF THIS EQUIPMENT ON AN ANNUAL BASIS IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

THE OPERATOR SHALL KEEP ADEQUATE RECORDS IN A FORMAT THAT IS ACCEPTABLE TO THE AQMD TO DEMONSTRATE COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS SPECIFIED IN THIS CONDITION AND 40 CFR PART 64.9 FOR A MINIMUM OF FIVE YEARS.

[RULE 1303(a)(1)-BACT, 3004(a)(4)-PERIODIC MONITORING, 40CFR PART 64]

4. THE RECORD OF THE OPERATING TEMPERATURE OF THE AFTERBURNER SHALL BE RETAINED FOR AT LEAST FIVE YEARS AND SHALL BE MADE AVAILABLE UPON REQUEST.  
[RULE 1303(a)(1)-BACT]
5. THIS EQUIPMENT SHALL BE MAINTAINED AND OPERATED AT A MINIMUM VOC DESTRUCTION EFFICIENCY OF 95% AND OVERALL VOC CONTROL EFFICIENCY (COLLECTION AND DESTRUCTION) OF 95% WHEN THE BASIC EQUIPMENT IT SERVES IS IN OPERATION.  
[RULE 1303(a)(1)-BACT]
6. THE TOTAL AMOUNT OF VOLATILE ORGANIC COMPOUND (VOC) EMISSIONS FROM THE CASTING MACHINES, RESULTING FROM THE USE OF MATERIALS CONTAINING VOC'S SHALL NOT EXCEED 3930 POUNDS IN ANY CALENDAR MONTH. EMISSIONS SHALL BE CALCULATED USING THE COLLECTION AND DESTRUCTION EFFICIENCY SPECIFIED IN THE PERMIT FOR THE AIR POLLUTION CONTROL SYSTEM.  
[RULE 1303(b)(2)-OFFSET]

## **FACILITY PERMIT TO OPERATE JOHANSON DIELECTRICS INC**

7. NO MORE THAN 6 CASTING MACHINES SHALL BE OPERATED AND VENTED, AT ANY TIME, TO THIS AFTERBURNER.  
[RULE 1303(b)(2)-OFFSET]

### **Periodic Monitoring:**

8. THE OPERATOR SHALL CONDUCT SOURCE TEST(S) IN ACCORDANCE WITH THE FOLLOWING SPECIFICATIONS:
- A. THE TEST SHALL BE CONDUCTED AT LEAST ONCE DURING THE LIFE OF THE PERMIT.
  - B. THE TEST SHALL BE CONDUCTED NO LATER THAN OCTOBER 1, 2010 UNLESS OTHERWISE APPROVED IN WRITING BY THE DISTRICT.
  - C. THE TEST SHALL BE CONDUCTED TO DETERMINE THE VOC EMISSIONS USING AN APPROVED DISTRICT METHOD TO DEMONSTRATE COMPLIANCE WITH ALL APPLICABLE PERMIT CONDITION(S), RULES AND REGULATIONS.
  - D. THE SOURCE TEST SHALL BE CONDUCTED WHILE THE AFTERBURNER IS OPERATING AT THE TEMPERATURES SPECIFIED IN THIS PERMIT. IF THE OPERATING TEMPERATURE DURING THE SOURCE TEST IS DIFFERENT THAN THE TEMPERATURES SPECIFIED IN THIS PERMIT, THE TEMPERATURES SPECIFIED IN THIS PERMIT MAY BE CHANGED TO REFLECT THE OPERATING TEMPERATURE DURING THE SOURCE TEST.
  - E. THE OPERATOR SHALL COMPLY WITH ADMINISTRATIVE CONDITIONS NOs. 8, 9, AND 10 OF SECTION E OF THIS FACILITY PERMIT.
  - F. THE OPERATOR SHALL SUBMIT TWO COMPLETE COPIES OF THE SOURCE TEST REPORT SPECIFIED IN CONDITION NO. 9 OF SECTION E OF THIS FACILITY PERMIT TO THE DISTRICT ENGINEERING AND COMPLIANCE DIVISION. THE ENGINEERING COPY OF THE REPORT SHALL BE SENT TO: SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT, COATING, PRINTING AND AEROSPACE OPERATIONS, ATTN: AIR QUALITY AND COMPLIANCE SUPERVISOR, 21865 COPLEY DRIVE, DIAMOND BAR, CA 91765. THE COMPLIANCE COPY OF THE REPORT SHALL BE SENT TO: SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT, P.O. BOX 4941, DIAMOND BAR, CA 91765.
- [RULE 3004(a)(4)]

### **Emissions and Requirements:**

9. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:
- PM: RULE 404, SEE APPENDIX B FOR EMISSION LIMITS  
PM: 0.1 GR/SCF, RULE 409  
CO: 2000 PPM, RULE 407

## **FACILITY PERMIT TO OPERATE JOHANSON DIELECTRICS INC**

### **PERMIT TO OPERATE**

**Permit No. F61777  
A/N 410489**

#### **Equipment Description:**

NICKEL AND TIN PLATING SYSTEM CONSISTING OF:

1. RINSE TANK, NO. 1, 2'-7" L. X 0'-11" W. X 1'-1.5" H., WATER, UNHEATED.
2. TIN PLATING TANK, NO. 2, 2'-7" L. X 1'-2.5" W. X 1'-1.5" H., UNHEATED, TIN CONCENTRATE, TIN MAKE-UP SOLUTION, NOT-SPARGED, WITH TWO 10 AMP RECTIFIERS.
3. RINSE TANK, NO. 3, 2'-7" L. X 0'-11" W. X 1'-1.5" H., WATER, ELECTRICALLY HEATED.
4. RINSE TANK, NO. 4, 2'-7" L. X 0'-11" W. X 1'-1.5" H., WATER, UNHEATED.
5. RINSE TANK, NO. 5, 2'-7" L. X 0'-11" W. X 1'-1.5" H., WATER, UNHEATED.
6. NICKEL PLATING TANK, NO. 6, 2'-7" L. X 1'-2.5" W. X 1'-1.5" H., 2 KW ELECTRICALLY HEATED, NICKEL SULFAMATE, BORIC ACID, NOT-SPARGED, WITH TWO 10 AMP RECTIFIERS.
7. RINSE TANK, NO. 7, 2'-7" L. X 0'-11" W. X 1'-1.5" H., WATER, UNHEATED.
8. RINSE TANK, NO. 8, 2'-7" L. X 0'-11" W. X 1'-1.5" H., WATER, UNHEATED.

#### **Conditions:**

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.  
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.  
[RULE 204]
3. MATERIALS USED IN THIS EQUIPMENT SHALL NOT CONTAIN ANY TOXIC AIR CONTAMINANTS IDENTIFIED IN RULE 1401, TABLE 1 WITH AN EFFECTIVE DATE OF MAY 3, 2002, EXCEPT NICKEL AND NICKEL COMPOUNDS.  
[RULE 1401]

## **FACILITY PERMIT TO OPERATE JOHANSON DIELECTRICS INC**

4. THE OPERATOR SHALL RECORD THE CONCENTRATION OF THE CHEMICAL IN THE TANK AND CHEMICAL ADDED DURING REPLENISHMENT. ALL RECORDS SHALL BE PREPARED IN A FORMAT WHICH IS ACCEPTABLE TO THE DISTRICT, SHALL BE RETAINED ON THE PREMISES FOR AT LEAST FIVE YEARS, AND SHALL BE MADE AVAILABLE UPON REQUEST OF THE EXECUTIVE OFFICER OR HIS REPRESENTATIVES.  
[RULE 109, 1303(b)(2)-OFFSET]
5. A TEMPERATURE GAUGE INDICATING DEGREES FAHRENHEIT SHALL BE MAINTAINED IN THE NICKEL PLATING TANK TO MEASURE THE TEMPERATURE OF THE SOLUTION IN THE TANK.  
[RULE 1303(b)(2)-OFFSET]
6. THE TEMPERATURE OF THE SOLUTION IN THE NICKEL PLATING TANK SHALL NOT EXCEED 150 DEGREES FAHRENHEIT.  
[RULE 1303(b)(2)-OFFSET]

### **Periodic Monitoring:**

7. THE OPERATOR SHALL DETERMINE AND RECORD THE TEMPERATURE OF THE SOLUTION IN THE TANK ONCE EVERY DAY.  
[RULE 3004(a)(4)]

### **Emissions and Requirements:**

8. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATION:  
  
HAP(S):           RULE 1426

## **FACILITY PERMIT TO OPERATE JOHANSON DIELECTRICS INC**

### **PERMIT TO OPERATE**

**Permit No. F71910  
A/N 433671**

#### **Equipment Description:**

ELECTROPLATING (NICKEL AND TIN) LINE CONSISTING OF:

1. NICKEL PLATING TANK NO. 21, BORIC ACID, NICKEL CHLORIDE, AND NICKEL SULFAMATE, 2'-4" W. X 2'-2" L. X 1'-10" D., WITH ONE 4-KW ELECTRIC HEATER AND ONE 100-AMP, 25-VOLT RECTIFIER.
2. NICKEL PLATING TANK NO. 22, BORIC ACID, NICKEL CHLORIDE AND NICKEL SULFAMATE, 1'-3" W. X 1'-5" L. X 1'-5" D., WITH ONE 4-KW ELECTRIC HEATER AND ONE 100-AMP, 25-VOLT RECTIFIER.
3. TIN PLATING TANK NO. 1, TIN SOLUTION, 2'-4" W. X 2'-2" L. X 1'-10" D., UNHEATED, WITH ONE 100-AMP, 25-VOLT RECTIFIER.
4. TIN PLATING TANK NO. 2, TIN SOLUTION, 1'-3" W. X 1'-5" L. X 1'-5" D., UNHEATED, WITH ONE 100-AMP, 25-VOLT RECTIFIER.
5. ASSOCIATED RINSE TANKS.

#### **Conditions:**

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.  
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.  
[RULE 204]
3. MATERIALS USED IN THIS EQUIPMENT SHALL NOT CONTAIN ANY TOXIC AIR CONTAMINANTS IDENTIFIED IN RULE 1401, TABLE 1 WITH AN EFFECTIVE DATE OF MAY 2, 2003 OR EARLIER, EXCEPT NICKEL AND NICKEL COMPOUNDS.  
[RULE 1401]

## **FACILITY PERMIT TO OPERATE JOHANSON DIELECTRICS INC**

4. THE OPERATOR SHALL RECORD THE CONCENTRATION OF THE CHEMICAL IN THE TANK AND CHEMICAL ADDED DURING REPLENISHMENT. ALL RECORDS SHALL BE PREPARED IN A FORMAT WHICH IS ACCEPTABLE TO THE DISTRICT, SHALL BE RETAINED ON THE PREMISES FOR AT LEAST FIVE YEARS, AND SHALL BE MADE AVAILABLE UPON REQUEST OF THE EXECUTIVE OFFICER OR HIS REPRESENTATIVES.  
[RULE 109, 1303(b)(2)-OFFSET]
5. A TEMPERATURE GAUGE INDICATING DEGREES FAHRENHEIT SHALL BE MAINTAINED IN EACH NICKEL PLATING TANK TO MEASURE THE TEMPERATURE OF THE SOLUTION IN THE TANK.  
[RULE 1303(b)(2)-OFFSET]
6. THE TEMPERATURE OF THE SOLUTION IN EACH NICKEL PLATING TANK SHALL NOT EXCEED 150 DEGREES FAHRENHEIT.  
[RULE 1303 (b)(2)-OFFSET]
7. THE OPERATOR SHALL NOT CONDUCT ANY SPARGING OPERATIONS IN THIS EQUIPMENT.
8. THIS PERMIT SHALL EXPIRE IF THE CONSTRUCTION OF THIS EQUIPMENT IS NOT COMMENCED BY NOVEMBER 12, 2005 UNLESS EXTENSION OF TIME HAS BEEN APPROVED IN WRITING BY A DISTRICT REPRESENTATIVE.  
[RULE 205]

### **Periodic Monitoring:**

9. THE OPERATOR SHALL DETERMINE AND RECORD THE TEMPERATURE OF THE SOLUTION IN THE TANK ONCE EVERY DAY.  
[RULE 3004(a)(4)]

### **Emissions and Requirements:**

10. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATION:

HAP(S):            RULE 1426

## **FACILITY PERMIT TO OPERATE JOHANSON DIELECTRICS INC**

### **PERMIT TO OPERATE**

**Permit No.  
A/N 434948**

#### **Equipment Description:**

AIR POLLUTION CONTROL SYSTEM CONSISTING OF:

1. AFTERBURNER, CATALYTIC, BAKER, 2,500,000 BTU PER HOUR, NATURAL GAS FIRED.
2. EXHAUST SYSTEM WITH ONE 15 HP EXTRACTION BLOWER VENTING A PTE WITH SIX CASTING MACHINES FOR VOC CONTROL (BACK-UP), OR VENTING TERMINATION OVENS AND A BOTTLE CLEANING HOOD FOR ODOR CONTROL.

#### **Conditions:**

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.  
[RULE 204]

2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.  
[RULE 204]

3. THE OPERATOR SHALL OPERATE AND MAINTAIN THIS EQUIPMENT ACCORDING TO THE FOLLOWING REQUIREMENTS:

THE CATALYST BED INLET TEMPERATURE SHALL BE MAINTAINED AT A MINIMUM OF 700 DEGREES FAHRENHEIT AND THE TEMPERATURE AT THE OUTLET OF THE CATALYST BED SHALL NOT EXCEED 1100 DEGREES FAHRENHEIT WHENEVER THE EQUIPMENT IT SERVES IS IN OPERATION.

THE OPERATOR SHALL OPERATE AND MAINTAIN A TEMPERATURE MEASURING AND RECORDING SYSTEM TO CONTINUOUSLY MEASURE AND RECORD THE TEMPERATURES AT THE INLET AND OUTLET OF THE CATALYST BED PURSUANT TO THE OPERATION AND MAINTENANCE REQUIREMENTS SPECIFIED IN 40 CFR PART 64.7. SUCH A TEMPERATURE MEASURING AND RECORDING SYSTEM SHALL HAVE AN ACCURACY OF WITHIN  $\pm 1\%$  OF THE TEMPERATURE BEING MONITORED AND SHALL BE INSPECTED, MAINTAINED, AND CALIBRATED ON AN ANNUAL BASIS IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

FOR THE PURPOSE OF THIS CONDITION, A DEVIATION SHALL BE DEFINED AS WHEN THE CATALYST BED INLET TEMPERATURE OF LESS THAN 700 DEGREES FAHRENHEIT AND A TEMPERATURE OF MORE THAN 1100 DEGREES FAHRENHEIT AT THE OUTLET OF THE CATALYST BED OCCURS DURING THE NORMAL OPERATION OF THE EQUIPMENT IT SERVES.



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THE OPERATOR SHALL REVIEW THE RECORDS OF THE CATALYST BED INLET AND OUTLET TEMPERATURE ON A DAILY BASIS TO DETERMINE IF A DEVIATION OCCURS OR SHALL INSTALL AN ALARM SYSTEM TO ALERT THE OPERATOR WHEN A DEVIATION OCCURS. WHENEVER A DEVIATION OCCURS, THE OPERATOR SHALL INSPECT THIS EQUIPMENT TO IDENTIFY THE CAUSE OF SUCH A DEVIATION, TAKE IMMEDIATE CORRECTIVE ACTIONS TO MAINTAIN THE CATALYST BED INLET TEMPERATURE AT OR ABOVE 700 DEGREES FAHRENHEIT AND THE CATALYST BED OUTLET TEMPERATURE AT OR BELOW 1100 DEGREES FAHRENHEIT, AND KEEP RECORDS OF THE DURATION AND CAUSE (INCLUDING UNKNOWN CAUSE, IF APPLICABLE) OF THE DEVIATION AND THE CORRECTIVE ACTIONS TAKEN.

ALL DEVIATIONS SHALL BE REPORTED TO THE AQMD PURSUANT TO THE REQUIREMENTS SPECIFIED IN 40 CFR PART 64.9 AND CONDITION NOS. 22 AND 23 IN SECTION K OF THIS PERMIT. THE REPORT SHALL INCLUDE THE TOTAL OPERATING TIME OF THIS EQUIPMENT AND THE TOTAL ACCUMULATED DURATION OF ALL DEVIATIONS FOR EACH SEMI-ANNUAL REPORTING PERIOD SPECIFIED IN CONDITION NO. 23, SECTION K OF THIS PERMIT.

THE OPERATOR SHALL SUBMIT AN APPLICATION WITH A QUALITY IMPROVEMENT PLAN (QIP) IN ACCORDANCE WITH 40 CFR PART 64.8 TO THE AQMD IF AN ACCUMULATION OF DEVIATIONS EXCEEDS 5 PERCENT DURATION OF THIS EQUIPMENT'S TOTAL OPERATING TIME FOR ANY SEMI-ANNUAL REPORTING PERIOD SPECIFIED IN CONDITION NO. 23, SECTION K OF THIS PERMIT. THE REQUIRED QIP SHALL BE SUBMITTED TO THE AQMD WITHIN 90 CALENDAR DAYS AFTER THE DUE DATE FOR THE SEMI-ANNUAL MONITORING REPORT.

THE OPERATOR SHALL CONDUCT ACTIVITY TEST FOR THE CATALYST BED ON A SEMI-ANNUAL BASIS. IN ADDITION, THE OPERATOR SHALL INSPECT AND MAINTAIN ALL COMPONENTS OF THIS EQUIPMENT ON AN ANNUAL BASIS IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

THE OPERATOR SHALL KEEP ADEQUATE RECORDS IN A FORMAT THAT IS ACCEPTABLE TO THE AQMD TO DEMONSTRATE COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS SPECIFIED IN THIS CONDITION AND 40 CFR PART 64.9 FOR A MINIMUM OF FIVE YEARS.

[RULE 1303(a)(1)-BACT, 3004(a)(4)-PERIODIC MONITORING, 40CFR PART 64]

4. THE RECORD OF THE OPERATING TEMPERATURE OF THE AFTERBURNER SHALL BE RETAINED FOR AT LEAST FIVE YEARS AND SHALL BE MADE AVAILABLE UPON REQUEST.  
[RULE 1303(a)(1)-BACT]
5. THIS EQUIPMENT SHALL BE MAINTAINED AND OPERATED AT A MINIMUM VOC DESTRUCTION EFFICIENCY OF 95% AND OVERALL VOC CONTROL EFFICIENCY (COLLECTION AND DESTRUCTION) OF 95% WHEN THE BASIC EQUIPMENT IT SERVES IS IN OPERATION.  
[RULE 1303(a)(1)-BACT]
6. THE TOTAL QUANTITY OF VOLATILE ORGANIC COMPOUND (VOC) EMISSIONS FROM THE CASTING MACHINES COMBINED, RESULTING FROM THE USE OF MATERIALS CONTAINING VOC, SHALL NOT EXCEED 3930 POUNDS IN ANY CALENDAR MONTH. FOR EQUIPMENT THAT IS VENTED TO AIR POLLUTION CONTROL (APC) EQUIPMENT, THE VOC EMISSIONS SHALL BE CALCULATED USING THE REQUIRED OVERALL CONTROL EFFICIENCY SPECIFIED IN THE PERMIT(S) FOR THE APC EQUIPMENT.  
[RULE 1303(b)(2)-OFFSET]

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7. THIS CATALYTIC AFTERBURNER SHALL SERVE THE TERMINATION OVENS AND BOTTLE CLEANING SYSTEM FOR ODOR CONTROL AS NECESSARY, OR AS A BACKUP SYSTEM FOR THE SIX CASTING MACHINES WHEN THE PRIMARY AFTERBURNER IS DOWN.  
[RULE 1303 (b)(2)-OFFSET]

### **Periodic Monitoring:**

8. THE OPERATOR SHALL CONDUCT SOURCE TEST(S) IN ACCORDANCE WITH THE FOLLOWING SPECIFICATIONS:
- A. THE TEST SHALL BE CONDUCTED AT LEAST ONCE DURING THE LIFE OF THE PERMIT.
  - B. THE TEST SHALL BE CONDUCTED NO LATER THAN OCTOBER 1, 2010 UNLESS OTHERWISE APPROVED IN WRITING BY THE DISTRICT.
  - C. THE TEST SHALL BE CONDUCTED TO DETERMINE THE VOC EMISSIONS USING AN APPROVED DISTRICT METHOD TO DEMONSTRATE COMPLIANCE WITH ALL APPLICABLE PERMIT CONDITION(S), RULES AND REGULATIONS.
  - D. THE SOURCE TEST SHALL BE CONDUCTED WHILE THE AFTERBURNER IS OPERATING AT THE TEMPERATURES SPECIFIED IN THIS PERMIT. IF THE OPERATING TEMPERATURE DURING THE SOURCE TEST IS DIFFERENT THAN THE TEMPERATURES SPECIFIED IN THIS PERMIT, THE TEMPERATURES SPECIFIED IN THIS PERMIT MAY BE CHANGED TO REFLECT THE OPERATING TEMPERATURE DURING THE SOURCE TEST.
  - E. THE OPERATOR SHALL COMPLY WITH ADMINISTRATIVE CONDITIONS NOs. 8, 9, AND 10 OF SECTION E OF THIS FACILITY PERMIT.
  - F. THE OPERATOR SHALL SUBMIT TWO COMPLETE COPIES OF THE SOURCE TEST REPORT SPECIFIED IN CONDITION NO. 9 OF SECTION E OF THIS FACILITY PERMIT TO THE DISTRICT ENGINEERING AND COMPLIANCE DIVISION. THE ENGINEERING COPY OF THE REPORT SHALL BE SENT TO: SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT, COATING, PRINTING AND AEROSPACE OPERATIONS, ATTN: AIR QUALITY AND COMPLIANCE SUPERVISOR, 21865 COPLEY DRIVE, DIAMOND BAR, CA 91765. THE COMPLIANCE COPY OF THE REPORT SHALL BE SENT TO: SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT, P.O. BOX 4941, DIAMOND BAR, CA 91765.
- [RULE 3004(a)(4)]

### **Emissions and Requirements:**

9. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:
- PM: RULE 404, SEE APPENDIX B FOR EMISSION LIMITS  
PM: 0.1 GR/SCF, RULE 409  
CO: 2000 PPM, RULE 407

## **FACILITY PERMIT TO OPERATE JOHANSON DIELECTRICS INC**

### **PERMIT TO OPERATE**

**Permit No.  
A/N 477126**

#### **Equipment Description:**

AIR POLLUTION CONTROL SYSTEM, CONSISTING OF:

1. ELECTROSTATIC PRECIPITATOR, FIBER-DYNE, INC., MODEL NO. ESP 2, 5'-6" DIA. X 12'-8" H.
2. EXHAUST SYSTEM WITH ONE 5 HP EXHAUST BLOWER VENTING SIXTEEN RULE 219 EXEMPT OVENS.

#### **Conditions:**

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.  
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.  
[RULE 204]
3. ALL COMPONENTS OF THIS EQUIPMENT SHALL BE CLEANED ON A MONTHLY BASIS.  
[RULE 1303(a)(1)-BACT]
4. THE OPERATOR SHALL KEEP ADEQUATE RECORDS TO DEMONSTRATE COMPLIANCE WITH CONDITION NO. 3.  
[RULE 1303(a)(1)-BACT]

#### **Periodic Monitoring:**

5. THE OPERATOR SHALL CONDUCT AN INSPECTION FOR VISIBLE EMISSIONS FROM ALL STACKS AND OTHER EMISSION POINTS OF THIS EQUIPMENT WHENEVER THERE IS A PUBLIC COMPLAINT OF VISIBLE EMISSIONS, WHENEVER VISIBLE EMISSIONS ARE OBSERVED, AND ON A SEMI-ANNUAL BASIS, AT LEAST, UNLESS THE EQUIPMENT DID NOT OPERATE DURING THE ENTIRE SEMI-ANNUAL PERIOD. THE ROUTINE SEMI-ANNUAL INSPECTION SHALL BE CONDUCTED WHILE THE EQUIPMENT IS IN OPERATION AND DURING DAYLIGHT HOURS. IF ANY VISIBLE EMISSIONS (NOT INCLUDING CONDENSED WATER VAPOR) ARE DETECTED THAT LAST MORE THAN THREE MINUTES IN ANY ONE-HOUR, THE OPERATOR SHALL EITHER:
  - A. VERIFY AND CERTIFY WITHIN 24 HOURS THAT THE EQUIPMENT CAUSING THE EMISSION AND ANY ASSOCIATED AIR POLLUTION CONTROL EQUIPMENT ARE OPERATING NORMALLY ACCORDING TO THEIR DESIGN AND STANDARD PROCEDURES AND UNDER THE SAME CONDITIONS UNDER WHICH COMPLIANCE WAS ACHIEVED IN THE PAST;
  - B. TAKE CORRECTIVE ACTION(S) THAT ELIMINATES THE VISIBLE EMISSIONS WITHIN 24

## **FACILITY PERMIT TO OPERATE JOHANSON DIELECTRICS INC**

- HOURS AND REPORT THE VISIBLE EMISSIONS AS A POTENTIAL DEVIATION IN ACCORDANCE WITH THE REPORTING REQUIREMENTS IN SECTION K OF THIS PERMIT; OR
- C. HAVE A CARB-CERTIFIED SMOKE READER DETERMINE COMPLIANCE WITH THE OPACITY STANDARD, USING EPA METHOD 9 OR THE PROCEDURES IN THE CARB MANUAL "VISIBLE EMISSION EVALUATION", WITHIN THREE BUSINESS DAYS AND REPORT ANY DEVIATIONS TO AQMD.

THE OPERATOR SHALL KEEP THE RECORDS IN ACCORDANCE WITH THE RECORDKEEPING REQUIREMENTS IN SECTION K OF THIS PERMIT AND THE FOLLOWING RECORDS:

- A. STACK OR EMISSION POINT IDENTIFICATION;
- B. DESCRIPTION OF ANY CORRECTIVE ACTIONS TAKEN TO ABATE VISIBLE EMISSIONS;
- C. DATE AND TIME VISIBLE EMISSION WAS ABATED; AND
- D. VISIBLE EMISSION OBSERVATION RECORDED BY A CERTIFIED SMOKE READER.  
[RULE 3004 (a)(4)]

### **Emissions and Requirements:**

6. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATION:

PM: RULE 404, SEE APPENDIX B FOR EMISSION LIMITS

## **FACILITY PERMIT TO OPERATE JOHANSON DIELECTRICS INC**

### **PERMIT TO OPERATE**

**Permit No.  
A/N 477128**

#### **Equipment Description:**

CASTING MACHINE # 1, JOHANSON, ASSET NO. 1801, CONTINUOUS BELT-DRIVE TYPE, 2'-0" W. x 38'-0" L. x 5'-5" H., 7.4 KW ELECTRICALLY HEATED, WITH A 1/3-HP CONVEYOR BELT.

#### **Conditions:**

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.  
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.  
[RULE 204]
3. THIS EQUIPMENT SHALL NOT BE OPERATED UNLESS IT IS VENTED TO AIR POLLUTION CONTROL EQUIPMENT WHICH IS IN FULL USE AND WHICH HAS BEEN ISSUED A PERMIT TO OPERATE BY THE EXECUTIVE OFFICER.  
[RULE 1303(a)(1)-BACT, 1303(b)(2)-OFFSET]
4. SOLVENT USED IN THE CERAMIC LIQUID SUSPENSIONS, CLEAN-UP SOLVENT, AND ANY OTHER MATERIALS USED IN THIS EQUIPMENT SHALL NOT CONTAIN ANY COMPOUNDS IDENTIFIED AS CARCINOGENIC AIR CONTAMINANTS IN RULE 1401 AS AMENDED ON DECEMBER 7, 1990.  
[RULE 1401]
5. THE TOTAL QUANTITY OF VOLATILE ORGANIC COMPOUND (VOC) EMISSIONS FROM THE CASTING MACHINES COMBINED, RESULTING FROM THE USE OF MATERIALS CONTAINING VOC, SHALL NOT EXCEED 3930 POUNDS IN ANY CALENDAR MONTH. FOR EQUIPMENT THAT IS VENTED TO AIR POLLUTION CONTROL (APC) EQUIPMENT, THE VOC EMISSIONS SHALL BE CALCULATED USING THE REQUIRED OVERALL CONTROL EFFICIENCY SPECIFIED IN THE PERMIT(S) FOR THE APC EQUIPMENT.  
[RULE 1303(b)(2)-OFFSET]
6. THE OPERATOR SHALL COMPLY WITH RULE 109 (RECORD KEEPING FOR VOLATILE ORGANIC COMPOUND EMISSIONS).  
[RULE 109]

## **FACILITY PERMIT TO OPERATE JOHANSON DIELECTRICS INC**

7. WITHIN 14 CALENDAR DAYS AFTER THE END OF EACH MONTH, THE OPERATOR SHALL TOTAL AND RECORD VOC EMISSIONS FOR THE MONTH FROM ALL EQUIPMENT AND OPERATIONS COVERED BY THE MONTHLY LIMIT. THE RECORD SHALL INCLUDE ANY PROCEDURES USED TO ACCOUNT FOR CONTROL DEVICE EFFICIENCY AND / OR WASTE DISPOSAL. IT SHALL BE SIGNED AND CERTIFIED FOR ACCURACY BY THE HIGHEST RANKING INDIVIDUAL RESPONSIBLE FOR COMPLIANCE WITH DISTRICT RULES.  
[RULE 109, 1303(b)(2)-OFFSET]
8. THE OPERATOR SHALL MAINTAIN A SINGLE LIST, WHICH INCLUDES ONLY THE NAME AND ADDRESS OF EACH PERSON FROM WHOM THE FACILITY ACQUIRED VOC CONTAINING MATERIAL REGULATED BY THE DISTRICT THAT WAS USED OR STORED AT THE FACILITY DURING THE PRECEDING 12 MONTHS.  
[RULE 109, 1303(b)(2)-OFFSET]
9. THE OPERATOR SHALL RETAIN ALL PURCHASE INVOICES FOR ALL VOC CONTAINING MATERIAL USED OR STORED AT THE FACILITY, AND ALL WASTE MANIFESTS FOR ALL WASTE VOC CONTAINING MATERIAL REMOVED FROM THE FACILITY, FOR 5 YEARS.  
[RULE 109, 1303(b)(2)-OFFSET]

### **Emissions and Requirements:**

10. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:  
  
VOC: RULE 109  
VOC: RULE 442  
[RULE 1303(b)(2)-OFFSET]

## **FACILITY PERMIT TO OPERATE JOHANSON DIELECTRICS INC**

### **RULE 219 EQUIPMENT**

#### **Equipment Description:**

RULE 219 EXEMPT EQUIPMENT, COATING EQUIPMENT, PORTABLE, ARCHITECTURAL COATINGS.

#### **Periodic Monitoring:**

1. THE OPERATOR SHALL KEEP RECORDS, IN A MANNER APPROVED BY THE DISTRICT, FOR THE FOLLOWING PARAMETER(S) OR ITEM(S):

FOR ARCHITECTURAL APPLICATIONS WHERE NO THINNERS, REDUCERS, OR OTHER VOC CONTAINING MATERIALS ARE ADDED, MAINTAIN SEMI-ANNUAL RECORDS OF ALL COATINGS CONSISTING OF (a) COATING TYPE, (b) VOC CONTENT AS SUPPLIED IN GRAMS PER LITER (g/l) OF MATERIALS FOR LOW-SOLIDS COATINGS, AND (c) VOC CONTENT AS SUPPLIED IN g/l OF COATING, LESS WATER AND EXEMPT SOLVENT, FOR OTHER COATINGS.

FOR OTHER ARCHITECTURAL APPLICATIONS WHERE THINNERS, REDUCERS, OR OTHER VOC CONTAINING MATERIALS ARE ADDED, MAINTAIN DAILY RECORDS FOR EACH COATING CONSISTING OF (a) COATING TYPE, (b) VOC CONTENT AS APPLIED IN GRAMS PER LITER (g/l) OF MATERIALS USED FOR LOW-SOLIDS COATINGS, AND (c) VOC CONTENT AS APPLIED IN g/l OF COATING, LESS WATER AND EXEMPT SOLVENT, FOR OTHER COATINGS.

[RULE 3004(a)(4)]

#### **Emissions and Requirements:**

2. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:

VOC: RULE 1113, SEE APPENDIX B FOR EMISSION LIMITS

VOC: RULE 1171, SEE APPENDIX B FOR EMISSION LIMITS

## **FACILITY PERMIT TO OPERATE JOHANSON DIELECTRICS INC**

### **RULE 219 EQUIPMENT**

#### **Equipment Description:**

RULE 219 EXEMPT EQUIPMENT, HAND WIPING OPERATIONS.

#### **Emissions and Requirements:**

1. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:

VOC: RULE 1171, SEE APPENDIX B FOR EMISSION LIMITS

VOC: RULE 109



## **FACILITY PERMIT TO OPERATE JOHANSON DIELECTRICS INC**

### **RULE 219 EQUIPMENT**

RULE 219 EXEMPT EQUIPMENT, SCREEN PRINTING EQUIPMENT, LOW USE OR EMISSIONS.

#### **Emissions and Requirements:**

1. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:

VOC: RULE 1130.1, SEE APPENDIX B FOR EMISSION LIMITS

VOC: RULE 1171, SEE APPENDIX B FOR EMISSION LIMITS

VOC: RULE 109

## **FACILITY PERMIT TO OPERATE JOHANSON DIELECTRICS INC**

### **RULE 219 EQUIPMENT**

#### **Equipment Description:**

RULE 219 EXEMPT EQUIPMENT, CLEANING EQUIPMENT, SMALL UNHEATED, NON-CONVEYORIZED

#### **Emissions and Requirements:**

1. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:

VOC: RULE 1171, SEE APPENDIX B FOR EMISSION LIMITS

VOC: RULE 109

## **FACILITY PERMIT TO OPERATE JOHANSON DIELECTRICS INC**

### **RULE 219 EQUIPMENT**

#### **Equipment Description:**

RULE 219 EXEMPT EQUIPMENT, AIR CONDITIONING UNITS

#### **Emissions and Requirements:**

1. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:

REFRIGERANT:	RULE 1415
REFRIGERANT:	40CFR 82 SUBART F

## **FACILITY PERMIT TO OPERATE JOHANSON DIELECTRICS INC**

### **RULE 219 EQUIPMENT**

#### **Equipment Description:**

RULE 219 EXEMPT EQUIPMENT, BOILER, > 400,000 BTU/HR BUT < 2 MMBTU/HR.

#### **Emissions and Requirements:**

1. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:

PM: 0.1 gr/scf, RULE 409  
NOx: 30 PPMV, RULE 1146.2  
CO: 400 PPMV, RULE 1146.2  
CO: 2000 PPMV, RULE 407